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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,155	03/16/2001	Loren M. Jones	087809 /0269968	5795
27498	7590	03/01/2005	EXAMINER	
PILLSBURY WINTHROP LLP 2475 HANOVER STREET PALO ALTO, CA 94304-1114			EL HADY, NABIL M	
			ART UNIT	PAPER NUMBER

2154

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,155

Applicant(s)

JONES ET AL.

Examiner

Nabil M El-Hady

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 25-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/2/2002.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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1. Claims 1-34 are pending in this application, claims 1-24 are elected, claims 25-34 are withdrawn.
2. Applicant's election of Group I – claims 1-24 in the reply filed on 9/15/2004 for restriction election is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
3. Reynolds et al. (WO 01/44891), cited by the applicant in IDS filed 7/2/2002 does not qualify as prior art for this application.
4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The insufficient antecedent basis for the following limitations:

- a) "the controller", claim 21, line 1;

made the claim unclear, and accordingly, claim 21 has not been treated.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 6,272,551), hereinafter "Martin".

8. As to claim 1, Martin discloses the invention substantially as claimed including a method for communicating between a first Fibre Channel (FC) enabled device and a second FC enabled device, where the communication occurs across a fabric that operates in accordance with a first protocol different from a FC protocol of the first and second FC enabled devices (abstract; col. 1, lines 55-67; col. 2, lines 29-36; col. 3, lines 25-30; and col. 6, lines 21-27), the method comprising: receiving, from the first FC enabled device, at a first gateway receiver a sequence of bytes (Fig. 1; 60 of Fig. 3) including at least one control character in accordance with the FC protocol (well known in a in FC protocol, see for example applicant specification, page 6, lines 19-27); replacing the at least one control character with at least one data character; generating an encapsulation header and an encapsulation footer; setting a control character indicator in the encapsulation header if a first byte in the sequence of bytes received at the gateway receiver is a control character; and setting an end of frame indicator in the encapsulation footer if a last byte in the sequence of bytes received at the first gateway receiver is an end of frame control character (col. 2, lines 45-55; col. 4, lines 50-59; and col. 5, lines 5-27, 47-64).

9. Martin does not specifically encapsulate FC packets, however, Martin's disclosure may readily be applied to a specific network and may be used to provide transparent translation of virtually any format of network packets (col. 6, lines 21-27).

10. As to claim 11, the claim is rejected for the same reasons as claim 1 above. In addition, Martin discloses a gateway (60, Fig. 3; and Fig. 6) for communicating among a first device and a second device both of which operate in accordance with a fibre channel (FC) protocol, and an intermediate network coupling the first device to the second device and having a first protocol (abstract; col. 1, lines 55-67; col. 2, lines 29-36; col. 3, lines 25-30; and col. 6, lines 21-27), the gateway comprising: a first gateway receiver (10, Fig. 1) that is to receive a sequence of bytes including at least one control character in accordance with the FC protocol; a first gateway transmitter that is to replace the at least one control character with at least one data character and to generate an encapsulation header and an encapsulation footer; and wherein the transmitter is to set a control character indicator in the encapsulation header if a first byte in the sequence of bytes received at the gateway receiver is a control character, and to set an end of frame indicator in the encapsulation footer if another byte in the sequence of bytes received at the first gateway receiver is an end of frame control character (15, 20, Fig. 1; and 72, Fig. 6).

11. As to claim 19, the claim is rejected for the same reasons as claim 1 and 11 above. In addition, Martin discloses a gateway for communicating among a first device and a second device, both of which operate in accordance with a fibre channel (FC) protocol, and an intermediate network coupling the first device to the second device and having a first protocol (abstract; col. 1, lines 55-67; col. 2, lines 29-36; col. 3, lines 25-30; and col. 6, lines 21-27), the gateway comprising: a first gateway receiver that is to receive a packetized encapsulated sequence in accordance with the first protocol from the intermediate network and to determine whether the packetized encapsulated sequence contains bytes to be forwarded to the first device (25, Fig. 2); wherein the first gateway receiver is to depacketize the packetized

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encapsulated sequence to produce an encapsulated sequence and to forward the encapsulated sequence to the first device if the packetized encapsulated sequence contains bytes to be forwarded to the first device; and a first gateway transmitter that is to receive the encapsulated sequence, to remove an encapsulation header and an encapsulation footer from the encapsulated sequence to produce a decapsulated sequence, and to replace in the decapsulated sequence at least one data character with at least one control character if an indicator in at least one of the header or footer indicates replacement (30, and 35, Fig. 2; and 72, Fig. 6).

12. As to claims 2 and 12, Martin discloses encapsulating the sequence of bytes with the encapsulation header and encapsulation footer (Fig. 4).

13. As to claims 3, 14, and 22, Martin discloses the first protocol is gigabit Ethernet (col. 2, lines 30-32).

14. As to claims 4, 5, 15, 16, 23, and 24, Martin does not necessarily disclose the control character is a K28.5 character, and the data character is a D28.5 character. However, these characters are well known in FC protocol (see for example applicant specification, page 6, lines 19-27).

15. As to claims 6, 13, and 17, Martin discloses placing at a control (DMA CONTROLLER 63, Fig. 5) the encapsulated sequence of bytes in a packet composed in accordance with the first protocol to produce a packetized encapsulated sequence; and transmitting, through the

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fabric, from the controller to a second gateway receiver the packetized encapsulated sequence (col. 5, line 47 to col. 6, line 5; and Fig. 1).

16. As to claims 7 and 18, Martin does not disclose a transmission rate for transmitting or receiving the packets. However, it would have been obvious to one skilled in the art at the time of the invention that reception rate should be less than the transmission rate in order to prevent flooding of a buffer memory.

17. As to claims 8 and 9, Martin discloses receiving at the second gateway receiver the packetized encapsulated sequence; removing the encapsulation header and the encapsulation footer; and replacing the at least one data character with the at least one control character to produce a regenerated sequence of bytes (Fig. 2; 72 of Fig. 6; and col. 6, lines 5-38).

18. As to claim 10, the claim is rejected for the same reasons as claims 1, 11, and 19 above. In addition, Martin discloses transmitting the regenerated sequence of bytes to the second FC enabled device (Fig. 2; and Fig. 6).

19. As to claim 20, Martin does not disclose an encoder that is to transmit to the first device in accordance with the FC protocol the decapsulated sequence. However, it would have been obvious to one skilled in the art at the time of the invention that a decoder may be used to format the received packets in accordance with the required protocol.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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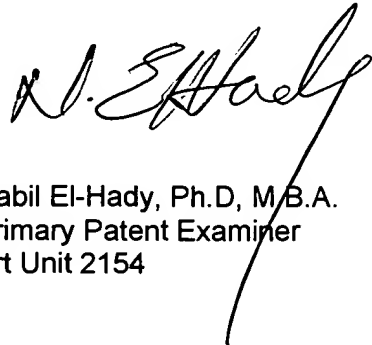
Latif et al. (US 6,400,730), Komatsu et al. (US 6,014,370) ; Chien (US 2002/0061018) ; Henson (US 2001/0002901); Brewer et al. (US 6,188,668); Mejia (US 2002/0176526); Fiacco et al. (US 6,098,125); Knobel et al. (US 6,765,871); Jinzaki et al. (US 2001/0009547); and Wilson et al. (US 6,738,821).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 22, 2005


Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
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